### **REMARKS**

Claims 1-6 are all the claims pending in the application, stand rejected.

# Claim Rejections - 35 U.S.C. § 102

Claim 1 is rejected under 35 U.S.C. § 102(e) as being anticipated by Miyaki et al (2001/0055464). This rejection is traversed for at least the following reasons.

### Limitation to a "Creation System" Must be Considered

Claim 1 is expressly directed to a <u>creation</u> system for synchronized melody and image information. The claim <u>must be</u> interpreted as directed to a <u>creation system</u> for three reasons.

First, Applicants have amended claim 1 to specify a "creation" function and structure in the body of the claim.

Second, as to the Examiner's point that the limitation "creation" appears in the preamble, Applicant respectfully submits that the Examiner cannot look at one word, but must look at the device defined by the entire claim. That device is defined by the limitation "creation system of melody and image synchronous information" in the preamble and now emphasized by an added recitation in the body of the claim. In defining the device, the entire preamble in combination with the body clearly is intended as a claim limitation, and should be considered as such by the Examiner in the light of a consistent line of cases decided by the CAFC. Specifically, supporting the significance of preamble limitations as a basis for defining the scope of the claimed subject matter is In re Paulsen, 31 USPQ2d 1671, 1672-74 (Fed. Cir. 1994) where the CAFC reversed the USPTO decision and held that the word "computer" in the preamble was a limitation in the claims and that to anticipate the claim the prior art must disclose a computer. See also In re Stencel, 4 USPQ2d 1071 (Fed. Cir. 1987). This approach extends far back to earlier CCPA cases where the court in In re Duva, 156 USPQ 90 (CCPA 1967) found that the limitations of even intended use in the preamble should be considered in obviousness determinations. See also Chisum on Patents 3:8.06[1]. Clearly, in the present case, Applicant is relying on the preamble in combination with the body to define the claimed invention and that entire claim limitation ("creation system of melody and image synchronous information") is necessary to complete the definition of the invention in the claim and must be considered by the Examiner.

Second, Applicant again asserts that the claimed creation system, which now has been amended, defines the invention as having sources of melody information and event information as well as a schedule program means for determining a timing at which melody information and image information are to be changed. On the basis of those sources of input, the "event information insertion means" acts to insert (or embed) event information into the melody information stream, as illustrated in Fig. 2, so that it later may be detected to control image generation during play of music. This concept is not found in Miyaki et al or Futamase et al.

## Means Plus Function Limitations Must Be Properly Interpreted

Following the amendment of claim 1, there now are two "means plus function" limitations that meet the three prong test and are to be interpreted under 35 U.S.C. § 112, paragraph 6, in accordance with the guidelines stated in MPEP 2181. In further compliance with the guidelines, Applicant submits that the function of the schedule program means, corresponding to element 16, is to determine a timing relationship between the melody and event functions. The function of the event information insertion "means" is for inserting event information and melody information at a timing of image renewal, so that the image may be reproduced in synchronization with the melody. This structure corresponds to the schedule making means 20.

Thus, according to the requirements of 35 U.S.C. § 112, sixth paragraph and the Federal Circuit decision in *In re Donaldson* 16 F.3d 1189 (Fed. Cir. 1994) and the guidance in MPEP 2182, the Examiner must find a structure in the prior art that is <u>limited to a creation system</u> that creates a stream of combined melody and image synchronous information. The Examiner has not identified such teaching in Miyaki et al.

### The Examiner's Reliance on Miyaki et al is Improper

The Examiner's reliance on the <u>same teachings</u> in Miyaki et al for information stream <u>creation</u> and in the rejection of claims 2-4, which concern image <u>reproduction</u> (and not creation), demonstrate that the cited teachings of Miyaki et al are not relevant by the Examiner's own admission. Moreover, the Examiner later relies on Futamase et al and not Miyaki et al to reject

claims 5 and 6, which are directed to a <u>creation</u> system and not a reproduction system. This also demonstrates that the Examiner is not considering the claimed subject matter with care.

### Miyaki et al

Specifically, the Examiner again asserts that Miyaki et al teaches a <u>creation</u> system for melody and synchronous image information at section [0037], section [0038], particularly lines 9-12, and section [0072], at lines 16-25. Applicant respectfully submits that the Examiner has not even made a *prima facie* case for anticipation by Miyaki et al and, in any event, Applicant has rebutted the Examiner's position with sound technical reasoning that the Examiner has not overcome by simply repeating his rejection.

As previously pointed out by Applicant, Miyaki et al at Paragraphs [0036]-[0038] describes a system for reproducing object information in synchronization with the performance of a song, where the object information includes image information (still picture or moving picture). The device 1 in Fig. 1 of Miyaki et al reproduces the object information in synchronization with an internal or external clock signal. Thus, both of the music performance information of a song and the object information can be reproduced and outputted in the synchronous information reproduction apparatus 1. An additional explanation of the manner in which reproduction of the song is accomplished is provided at Paragraphs [0070]-[0072].

Notably, none of this information concerns the actual <u>creation</u> of melody and image synchronous information, particularly a <u>stream of melody information having event information embedded therein</u>. Thus, Applicant again asserts that the reference does not anticipate the present invention as defined by claim 1, (and claims 5 and 6) since it is only concerned with <u>reproduction and not creation</u> and does not teach a stream of melody information having event information embedded therein.

For all of the foregoing reasons, the claim should be considered patentable.

### Claim Rejections - 35 U.S.C. § 103

Claims 2-6 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Futamase et al (2004/0007120) in view of Miyaki et al (2001/0055464). This rejection is traversed for at least the following reasons.

### Claim 2

The Examiner repeats the text of his rejection of claim 2 on the basis of Futamase et al. The Examiner continues to assert that Futamase et al teaches (1) melody generation means, with reference to paragraphs [0195] and [0196], (2) event information detecting means, with reference to paragraph [0203] and image generating means, with reference to paragraphs [0206] and [0207].

However, the Examiner also admits that Futamase et al does not mention expressly the functions of two of these limitations including (1) for the "melody generation means," the function that it "continues to provide melody information" until said event information detection means detects event information, and (2) for the "event information detection means," the function that it "detects event information and causes said image generation means to generate an image for display and renew said displayed image until another event information is detected."

The Examiner looks to Miyaki et al to remedy this admitted deficiency, and asserts that Miyake et al teaches such "melody generation means" and "event information detection means." The Examiner then finds the teachings combinable or at least suggesting a modification of Futamase et al on the basis of the cited sections of Miyaki et al. Finally, in the Response to Arguments section at page 6 of the Office Action, the Examiner amplifies his position that three is a reproduction of multimedia information in association with the original music performance information by pointing to the portions of Miyaki et al noted above as well as further teachings in Figs 3a and 3b as well as sections [0060]-[0062], section [0095] and section [0002].

First, claim 2 has been amended to describe the sequence of information as illustrated in Fig. 2 as a "stream of information" and to specify how the embedded event information is extracted from the stream so that image information can be changed.

Second, in this latter regard, Applicants note that the information in Miyaki et al is not "embedded," as that term reflects the placement of information in a stream as illustrated in Fig. 2 of the present application, but simply accompanies the performance information.

Third, again, on the basis of these clear differences in function, there is a flaw in the Examiner's analysis for failure to follow USPTO Guidelines for "means plus function" limitations.

The USPTO has adopted specific Guidelines for examining "means plus function" type claims. According to the Guidelines, these claim limitations must be interpreted in accordance with 35 U.S.C. § 112, sixth paragraph on the statutory and administrative bases already identified with respect to claim 1. The burden of proof for demonstrating that the claim limitations, as properly interpreted in accordance with the patent statute and the *In re Donaldson* decision, is on the Examiner.

In the previous Amendment, Applicants first identified the manner in which the Examiner failed to carry his burden of proof. Second, even if the Examiner's brief comments were considered to make a prima facie case, Applicants identified the corresponding structure for each means limitation. Applicant also demonstrated how the prior art has (1) NO identical function and (2) NO structure that is either identical to or an equivalent of the corresponding structure. Thus, the burden of proof clearly remained on the Examiner. In the present Office Action, the Examiner has not even considered the nature of these limitations, but has simply made up his own self serving basis for an interpretation that can justify a rejection. This is contrary to the law and USPTO Guidelines. The mere citation to paragraphs in a specification does not provide the analysis required by the Guidelines.

Thus, again Applicants emphasize that neither Futamase et al nor Miyaki et al teach (1) the express functions of these limitations nor (2) an identical or equivalent structure, as would be required under the *In re Donaldson* decision and USPTO Guidelines cited above.

As previously explained by the Applicant, the relevant corresponding structure in the present application are found in Fig. 1. The processing illustrated in the flowcharts of Figs. 3 and 5 shows that the <u>detection of event information</u>, which is <u>embedded in</u> melody information,

will result in the <u>delivery of the event information</u> to the image timing control means (S105, S204), which generates an instruction for image renewal. Claim 2 has been amended to specify an image timing control means with this specific function. The image generation means responds by generating an instruction for image renewal (S106, S205). <u>As a result, images are renewed</u> (S107, S206) and the renewed images are displayed (S108, S207). Where there is no event information detected, the melody information is simply delivered to the melody generator and outputted (S103, S104; S202, S203).

Applicant respectfully submits that there is <u>no comparable function</u> in Miyaki et al. In particular, there is <u>no teaching</u> of (1) event information that is (2) inserted in melody information and (3) <u>controls image information in the manner claimed in claim 2</u>. As expressly stated in the claim, the "event information is inserted in the melody information," as illustrated in Fig. 2. Notably, claim 2 further states that the detection of event information <u>causes the image generation means to generate an image for display and renews the image until another event information is detected</u>. Nothing of this sort is taught in Miyaki et al.

## Miyaki et al

Specifically, the Examiner again refers to the teaching of Miyaki et al at paragraphs [0038] and [0072] for a teaching of a synchronous information <u>reproduction</u> apparatus for "providing melody information on a continuous basis, detecting event information and generating an image for display and renewing said display image until another event information is detected."

Miyaki et al at paragraph [0038] simply refers to the possible sources of a clock signal for reproduction of information as being an external source 2 or a timing clock of a MIDI message (music performance information). It also has a generic discussion of the reproduction of both music performance information and object information by synchronous reproduction apparatus 1 on the basis of the timing information. However, there is no further discussion of how the object and song information is related, nor any disclosure of an embedding of event information in melody information, as claimed.

At best, paragraph [0039] specifies that the start/end of the performance or information for selecting a song to be performed is provided by the external clock device 2 (external synchronous mode discussed at paragraph [0040]) together with a clock signal from the MIDI message that reflects the tempo of the music being played (internal synchronous mode discussed at paragraph [0041]). However, this does not teach the feature of using event information that is inserted into a melody information to control a display in the manner claimed or, more specifically with respect to the claims, the provision of melody until event information is detected and then the generation of an image for display coupled with renewal until another event information is detected.

Miyaki et al at paragraph [0072] describes the starting operation of the information reproduction apparatus 1 (or PC serving as a main body), the selection of a song by an operator (F3) designation of a song number (ID), the use of FF, REW and song position pointer F2. The text at lines 16-25 of paragraph [0072] that is relied upon by the Examiner concerns an external START signal that is transmitted from an external source 2 along with timing clock F8, channel message EF. The text simply describes the reproduction of an object information and music performance information on the basis of a clock F8. However, this does not teach the limitation that the Examiner admits is missing from Futamase et al.

In sum, the specific features of the invention clearly are distinguishable from Futamase et al and Miyaki et al. The present invention is simpler than that in Futamase et al and Miyaki et al, particularly with respect to the manner in which the processing according to the flowcharts in Figs. 3 and 5 is performed. For example, the delivery of melody information on a continuous basis until event information is detected at step S102 and S201, respectively, and the delivery of image information until a new event information is detected, remain a clear basis for asserting patentability.

#### Claims 3 and 4

The Examiner looks to the disclosure in Futamase et al for teachings relevant to claims 3 and 4, but as already admitted by the Examiner, Futamase et al fails to teach the basic structure and function in parent claim 2. Thus, claim 2 and the claims dependent thereon are patentable.

Q78035

Amendment under 37 C.F.R§ 1.111 U.S.S.N 10/688,888

Claims 5 and 6

As previously noted, claims 5 and 6 are directed to a system for creating synchronized melody and image data, NOT a system for reproducing such data. Nonetheless, the Examiner

has treated the reproduction system of claims 2-4 and the creation system of claims 5 and 6 the

same, using the same analysis. Again, surprisingly, the Examiner applies Futamase et al against

claim 5 and applies Miyake et al against claim 1, though both are directed to creation system

structures. For the reasons given for the patentability of claim 1, claims 5 and 6 also should be

patentable.

In view of the above, reconsideration and allowance of this application are now believed

to be in order, and such actions are hereby solicited. If any points remain in issue which the

Examiner feels may be best resolved through a personal or telephone interview, the Examiner is

kindly requested to contact the undersigned at the telephone number listed below.

The USPTO is directed and authorized to charge all required fees, except for the Issue

Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any

overpayments to said Deposit Account.

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